

Title (en)

NESTED ANTI-RESONANT NODELESS OPTICAL FIBER AND SUBSURFACE SYSTEM USING THE SAME

Title (de)

VERSCHACHTELTE NICHTRESONANTE KNOTENLOSE OPTISCHE FASER UND UNTERIRDISCHES SYSTEM DAMIT

Title (fr)

FIBRE OPTIQUE SANS NOEUD ANTI-RÉSONNANTE IMBRIQUÉE ET SYSTÈME SOUTERRAIN L'UTILISANT

Publication

EP 4067952 A2 20221005 (EN)

Application

EP 22166149 A 20220331

Priority

US 202117220864 A 20210401

Abstract (en)

A nested anti-resonant nodeless hollow core fiber (NANF) (102) enables transmission of multi-kilowatt, continuous wave (CW) light beams operating in wavelengths between 1050 nm and 1100 nm provided by single mode lasers. Such a NANF has little loss over kilometer ranges, and can be employed in long distance subsurface applications, such as in the petroleum industry.

IPC 8 full level

G02B 6/02 (2006.01)

CPC (source: EP US)

G02B 6/02328 (2013.01 - EP); **G02B 6/02357** (2013.01 - EP); **G02B 6/032** (2013.01 - US)

Citation (applicant)

WO 2015185761 A1 20151210 - UNIV SOUTHAMPTON [GB]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 4067952 A2 20221005; **EP 4067952 A3 20230111**; US 11555958 B2 20230117; US 2022317369 A1 20221006

DOCDB simple family (application)

EP 22166149 A 20220331; US 202117220864 A 20210401